Direct Wholesale Roaming Access Reference Offer

MEO – Serviços de Comunicações e Multimédia, S.A.

Version 5  2017-06-15
<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Changes effected</th>
</tr>
</thead>
<tbody>
<tr>
<td>V1</td>
<td>2013-01-01</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; version</td>
</tr>
<tr>
<td>V2</td>
<td>2013-07-01</td>
<td>Price update of regulated wholesale Roaming services</td>
</tr>
<tr>
<td>V3</td>
<td>2014-01-27</td>
<td>Company name change to MEO</td>
</tr>
<tr>
<td>V4</td>
<td>2014-07-01</td>
<td>Price changes</td>
</tr>
<tr>
<td>V5</td>
<td>2017-06-15</td>
<td>Price changes</td>
</tr>
</tbody>
</table>
Index

1. INTRODUCTION
2. DEFINITIONS
3. DIRECT ROAMING ACCESS SERVICES
4. GENERAL TERMS OF THE OFFER
5. ACCESS REQUESTS AND IMPLEMENTATION
6. TECHNICAL IMPLEMENTATION
7. PRICES
8. BILLING AND PAYMENT
9. CONFIDENTIALITY
10. DATA PRIVACY
11. DISPUTE RESOLUTION
12. FORCE MAJEURE
13. APPLICABLE LEGISLATION

ANNEXES

ANNEX 1 – PRICES
ANNEX 2 – TECHNICAL INFORMATION
1. INTRODUCTION

This Direct Wholesale Roaming Access Reference Offer (hereinafter referred to as “Offer”) defines the conditions applicable to the provision, by MEO – Serviços de Comunicações e Multimédia, S.A. (hereinafter referred to as “MEO”), of international roaming access, in accordance with Regulation (EU) no 531/2012 of the European Parliament and of the Council of 13 June 2012 on roaming on public mobile communications networks within the Union (hereinafter referred to as “Regulation”) and, where and as applicable, with BEREC Guidelines of 27 September 2012, on the application of Article 3 of such Regulation (hereinafter referred to as “Guidelines”).

The Offer aims to provide roaming services to any undertaking covered by the Regulation¹ that agrees with MEO their provision and which is entitled, under the law of its Member State, to provide roaming services to its customers and covers roaming services supported in MEO’s mobile network in Portugal.

2. DEFINITIONS

The terms and abbreviations used in this Offer have the following meanings:

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>3GPP</td>
<td>Third Generation Partnership Project</td>
</tr>
<tr>
<td>Access Seeker</td>
<td>Any undertaking covered by the Regulation which is entitled, under the law of its Member State, to provide roaming services to its customers;</td>
</tr>
<tr>
<td>CAMEL</td>
<td>Customized Application for Mobile network Enhanced Logic - a network solution which allows the functionality of IN (Intelligent Network) services for roamers. It is commonly associated with Pre-paid Roaming, as it allows real-time billing and call supervision, but it is not limited to Pre-paid services;</td>
</tr>
</tbody>
</table>

¹ At present, and for technical reasons, this Offer is limited to MNOs and full MVNOs.
| Direct Wholesale Roaming Access Agreement or Agreement | The document that formalizes the mutual consensus between MEO and the Access Seeker; |
| Direct Wholesale Roaming Access | The making available of facilities and/or services by a mobile network operator to another undertaking, under Regulation (EU) no 531/2012 defined conditions, for the purpose of that other undertaking providing regulated retail roaming services to roaming customers; |
| ETSI | European Telecommunications Standards Institute; |
| Guidelines | BEREC Guidelines on the application of Article 3 of the Regulation; |
| GSMA | Association of Mobile Operators and related companies, dedicated to support the standardization, implementation and promotion of GSM; |
| IR | International Roaming |
| MNO | Mobile Network Operator; |
| MVNO | Mobile Virtual Network Operator; |
| NRTRDE | Near Real Time Roaming Data Exchange is a daily report consisting of the transfer of individual records of the visited network to the customer network in less than 4 hours after the traffic; |
| PRD | Permanent Reference Documents means a document noted as such by the GSMA and listed as such by the GSMA on the list of Permanent Reference Documents; |
| **Roaming** | The ability for wireless customers to automatically make and receive voice calls, send and receive data, or access other services when travelling outside the geographical coverage area of their own home network, by means of using a visited network, the VPMN; |
| **Roaming Customer** | A person or entity with a valid legal relationship with the Access Seeker using a GSM SIM (Subscriber Identity Module) and/or a GSM USIM (Universal Subscriber Identity Module) for use by that person or entity of the Services while roaming on MEO’s public mobile communications network in accordance with the terms and conditions of this Offer and the Direct Wholesale Roaming Access Agreement; |
| **Regulated wholesale roaming services** | The international wholesale roaming services covered by the Regulation; |
| **Regulation** | Regulation (EU) no 531/2012 of the European Parliament and of the Council of 13 June 2012 on roaming on public mobile communications networks within the Union; |
| **TAP** | Transfer Account Procedure (TAP) is the process of enabling serving parties to invoice their commercial partner and for those partners to onward charge their customers in a timely manner and is usually billed in SDRs (Special Drawing Rights); |
| **VPMN** | Visited Public Mobile Network, the network that provides services outside the coverage area of the home network. |
3. DIRECT ROAMING ACCESS SERVICES

This Offer provides the wholesale roaming services which are necessary for an MNO or full MVNO to offer retail roaming services, namely:

a) Regulated wholesale roaming services:
   - Origination of regulated roaming calls;
   - Origination of regulated roaming SMS messages;
   - Regulated data roaming services.

b) Supplementary wholesale roaming services:
   - Termination of received roaming calls;
   - Termination of received roaming SMS messages;
   - Triggering of CAMEL phase 1;
   - Origination of Circuit Switched Video Telephony Calls, if available.

4. GENERAL TERMS OF THE OFFER

The services included in the Offer shall be provided in accordance with the terms and conditions set out in this Offer and in a Direct Wholesale Roaming Access Agreement (hereinafter referred to as the “Agreement”), whose draft shall be provided to the Access Seeker at the latest one month after acceptance of its request by MEO.

This Agreement shall be based on permanent reference documents (PRD) developed by the GSM Association (GSMA) and shall include:
   - International Roaming Agreement, based on PRD AA.100;
   - Annexes to the Agreement, including:
     a) Service Level Agreement (SLA) setting out the standards of service level to be expected;
     b) Annex on financial security to be provided by the Access Seeker for its payment obligation pursuant to the Agreement. This financial security, which amount shall also take into consideration the critical fraudulent characteristics associated with the roaming business, shall be either a cash deposit or a bank guarantee.
c) The annual traffic forecasts that the Access Seeker shall submit to MEO by the end of June, at latest, each year, for the traffic to be originated and terminated by its roaming customers during the following year, by service.

Services are provided based on the precondition that roaming customers are expected to have a usage pattern that does not differ substantially from other EU roaming customers on MEO’s network.

Fraud prevention procedures will be supported based on GSMA binding PRD BA.20 specifying Near Real Time Roaming Data Exchange (NRTRDE) procedure.

5. ACCESS REQUESTS AND IMPLEMENTATION

The Access Seeker shall send MEO a written request, in Portuguese or English, describing the scope of the services required, to the following address:

   MEO – Serviços de Comunicações e Multimédia, S.A.
   Wholesale Department
   R. Andrade Corvo, 6 – 2nd floor
   1069 - 220 Lisboa
   Portugal

with a copy to the following electronic mail address: meoroaming@telecom.pt.

The following documentation, duly signed by authorized personnel of the Access Seeker, shall be attached to the request:

- Overview of the services requested from MEO;
- Certificate of registration or corresponding documentation of the Access Seeker;
- Written documentation that the Access Seeker is entitled to provide roaming services to end customers within any Member State of the European Union;
- Written documentation of the European Union numbering resources assigned to its mobile service, according to E164, E212 and E214;
- Annual report of the previous financial year;
- Financial figures of the last quarter of the current year;
- Initial estimate of traffic volume per roaming service covered in the request;
• Information on signaling connectivity to establish interconnection;
• Information on TAP file and NRTRDE provisioning including fraud prevention mechanisms and protocols that the Access Seeker has in place;
• Contact information of the Access Seeker.

MEO will review the Access Seeker request within 10 working days of its receipt and will take one of the following decisions:

a) to accept the request, fully or partly.
   In this case MEO will send, by electronic mail, to the contacts provided by the Access Seeker, the draft Agreement within one month period from receiving the direct wholesale access request. In case the request does not include all the required information, the one month period will count from the date when MEO receives all necessary documentation/information.

b) to refuse the Access request.
   In this case MEO shall provide the reasons of the refusal to the Access Seeker, which may include:
   i) The Access Seeker did not provide the required documentation according to above, and/or,
   ii) The required documentation was not signed by duly authorized personnel of the Access Seeker;
   iii) MEO has to deploy an undue level of resources to implement the direct wholesale access and it is reasonable to foresee that the implementation costs will not be recovered within a reasonable period of time.

If the Access Seeker does not eliminate deficiencies or inconsistencies in its request in order to be in line with this article within 10 working days, after MEO’s notification, it is considered that the Access Seeker gave up its request.

6. TECHNICAL IMPLEMENTATION

MEO will start the preparation of the technical implementation after the Agreement has been signed, with the aim to start tests with the Access Seeker for direct wholesale access and to be ready to provide this access within a maximum period of three
months after the Agreement signature, deducted of any delays attributable to the Access Seeker.

Implementation shall be done in accordance with the procedures described or foreseen in the applicable Annexes of the Agreement.

Interoperability, technical interfaces and protocols will be carried out in accordance with the technical specifications defined and adopted by 3GPP and consistent with best industry practice, including the ETSI technical specifications defined and adopted by 3GPP (hereinafter reference to as “Technical Specifications”).

After successful completion of technical and billing test procedures the commercial launch for each service starts in the date foreseen in a Commercial Launch Letter agreed by the parties.

After commercial launch both MEO and Access Seeker shall ensure that TAP file and NRTRDE file exchange procedure is working correctly.

7. PRICES

The prices for the regulated wholesale roaming services included in this Offer are listed in Annex 1 hereto.

The charges for supplementary wholesale roaming services shall be provided with the Agreement, depending on the Access Seeker’s specific service requirements and shall be based on fair and reasonable prices.

8. BILLING AND PAYMENT

Billing and payment conditions shall be defined in the Agreement, based on the relevant PRDs.

9. CONFIDENTIALITY

MEO and the Access Seeker agree to treat all information exchanged between them (hereinafter referred to as “Information”) as confidential and agree not to disclose such Information in any manner whatsoever, in whole or in part except as specified below.
MEO and the Access Seeker shall not use any Information other than in connection with the discussions between them and any transactions resulting there from, or for the provision of the Services as contemplated herein. They are also entitled to disclose Information to third parties in the context of a possible bona fide acquisition or sale of its operations in support of reasonably related due diligence activities in respect thereof, or for the borrowing of funds or obtaining of insurance, in which case any third parties (including lenders or insurance companies) involved in such activities shall be obliged to enter into confidentiality agreements which have an equivalent content before receiving the Information. In addition to the foregoing, MEO and the Access Seeker shall also be entitled to share information with Affiliated Companies, directors, agents, professional advisers, contractors, employees or resellers on a need to know basis provided that such Affiliated Companies, agents, contractors, employees or resellers have entered into confidentiality agreements in a form substantially equivalent to and on terms and conditions no less stringent than the terms and conditions hereby set out.

Notwithstanding the above stated, Information and the contents of this Agreement may be transmitted to governmental, judicial or regulatory authorities, as may be required by any governmental, judicial or regulatory authority.

For the purposes of the Agreement, Information and the contents shall not be considered to be confidential if such Information is:

a) in or passed into the public domain other than by breach of its receiver; or
b) known to a receiving party prior to the disclosure by a disclosing party; or
c) disclosed to a receiving party without restriction by a third party having the full right to disclose; or
d) independently developed by a receiving party to whom no disclosure of confidential Information relevant to such Information has been made.

Infringement of this confidentiality duty represents a breach of the present Offer and, as such, either MEO or the Access Seeker, as the case may be, shall compensate the other of all harm suffered as a result of such breach.

The confidentiality obligation shall bind MEO and the Access Seeker for a period of five years, but shall not in any way limit or restrict a disclosing party’s use of its own confidential Information.
10. DATA PRIVACY

MEO and the Access Seeker’s obligations to transfer information to the other shall not apply to the extent that one of them is prohibited from doing so by the regulations and laws of its own country applicable to IR and/or data protection.

The Access Seeker shall inform its customers that during roaming, the storage, processing and transfer of their personal data may be subject to regulation different from the regulations in their own country.

MEO and the Access Seeker shall agree that they shall comply with the Data Privacy Regulations/Laws applicable in their respective countries.

11. DISPUTE RESOLUTION

All disputes in connection with this Offer, if not settled by escalation procedures, shall be finally settled under the Rules of Conciliation and Arbitration of the International Chamber of Commerce (ICC) by three (3) arbitrators appointed in accordance with the said Rules.

In addition, in line with Article 17, Paragraph 1, of the Regulation, the dispute resolution procedures laid down in Articles 20 and 21 of the Framework Directive shall apply.

12. FORCE MAJEURE

If during the term of this Offer a case of force majeure occurs, preventing the timely provision of the Roaming Services, the dates and deadlines will be postponed for a period corresponding to the delay. MEO and the Access Seeker shall do all in its best to minimize the consequences of the event.

It is understood by force majeure any event, unpredictable and unavoidable, whose circumstances and effects are beyond the control of MEO or of the Access Seeker, or any other unforeseeable obstacle that MEO or the Access Seeker is not able to overcome with reasonable efforts and that prevents them, wholly or partially, permanently or temporarily, to meet its obligations under this Offer.
**13. APPLICABLE LEGISLATION**

This Offer is prepared in accordance with the Regulation (EU) No 531/2012 of the European Parliament and of the Council of 13 June 2012 on roaming on public mobile communications networks within the Union and, to the extent applicable, the BEREC Guidelines of 27 September 2012 on the application of Article 3 of such Regulation.

The Offer and any matters relating hereto shall be governed by and construed in accordance with the referred Regulation and the laws of Portugal.
ANNEX 1

Prices
This Annex presents the prices for the Direct Roaming Access Services.

The prices hereby presented do not include VAT.

1. **Prices applicable to Regulated Wholesale Roaming Services:**

<table>
<thead>
<tr>
<th>Services (1)</th>
<th>Price</th>
<th>Charging Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call origination to EU countries</td>
<td>0.032 EUR/min</td>
<td>per second, after an initial period of 30 seconds</td>
</tr>
<tr>
<td>SMS origination to EU countries</td>
<td>0.01 EUR</td>
<td>per SMS</td>
</tr>
<tr>
<td>Data roaming service (GPRS) to EU countries</td>
<td>7.7 EUR/GB</td>
<td>per KB</td>
</tr>
</tbody>
</table>

(1) EU: European Union countries or countries adopting Regulation.

2. **Other services**

Charges for supplementary wholesale roaming services shall be provided with the Agreement, depending on the Access Seeker’s specific service requirements and shall be based on fair and reasonable prices.
ANNEX 2

Technical information
MSISDN number ranges:

<table>
<thead>
<tr>
<th>ROUTING INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCITT E.164 Number series:</td>
</tr>
<tr>
<td>MSISDN Number range(s):</td>
</tr>
<tr>
<td>Network nodes Global Title number range(s):</td>
</tr>
<tr>
<td>E.212 Number series:</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>E.214 Mobile Global Title:(MGT)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Does Number Portability apply?</td>
</tr>
</tbody>
</table>

International SCCP Carrier List:

<table>
<thead>
<tr>
<th>INTERNATIONAL SCCP GATEWAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature:</td>
</tr>
<tr>
<td>Type:</td>
</tr>
<tr>
<td>International DPC:</td>
</tr>
<tr>
<td>Date for introduction of Version 2 SCCP (ETS 300 009)</td>
</tr>
</tbody>
</table>
### GPRS Information

| Inter PLMN GSN Backbone IP address range(s)¹ | 195.8.28.192/26  
|                                            | 195.8.28.64/28  
|                                            | 195.8.28.80/28  
|                                            | 88.214.190.0/23 |
| Private AS Number of MEO:                  | 64620           |
| GRX provider:                              | CPRM            |

¹ IP addresses or IP address range(s) of GPRS Support Nodes (GGSN and SGSN) that give onto the inter-PLMN backbone. This information is used for firewall and Border Gateway configuration (see PRD IR.34).